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**Back to the Future: How a Look Back at Cold War Naval Doctrine can Inform  
Operational Planning for U.S.-PRC Maritime Conflict**

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**A paper submitted to the Faculty of the Naval War College in partial satisfaction of the requirements of the Department of Joint Military Operations.**

**The contents of this paper reflect my own personal views and are not necessarily endorsed by the Naval War College or the Department of the Navy.**

**Signature: \_\_\_\_\_**

**28 November 2010**

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## **Abstract**

Whether or not it is likely that the United States will be required to defend Taiwan from Chinese coercion, U.S. law requires that our armed forces maintain the capacity to do so. In order to see around Chinese opacity regarding maritime doctrine and planning, an analysis of U.S. and Soviet Cold War naval doctrine, along with an assessment of what the results of a U.S.-Soviet maritime conflict might have been, can provide lessons learned regarding Cold War operational planning and doctrinal interactions. Given strong Soviet influences on the development of the People's Republic of China's (PRC) maritime doctrine and the use by the PRC of large numbers of Russian-built or Russian-derived platforms and weapons, these indirect insights can then inform U.S. operational planning for a potential future maritime conflict with the PRC. This paper provides recommendations for operational commanders to consider in planning for a potential U.S.-PRC maritime conflict, and asks still-unanswered questions inspired by aspects of Soviet doctrine that point to "unknown unknowns" in our knowledge of PRC naval doctrine and planning.

## INTRODUCTION

According to the Taiwan Relations Act, it is the policy of the United States to “maintain the capacity of the United States to resist any resort to force or other forms of coercion that would jeopardize the security, or the social or economic system, of the people on Taiwan.”<sup>1</sup> Regardless of the likelihood of physical coercion of Taiwan by the People’s Republic of China (PRC), planning for the United States to maintain this required capacity to resist such coercion must be informed, first and foremost, by an understanding of the potential threat. As stated by Sun Tzu, “Know the enemy and know yourself; in a hundred battles you will never be in peril.”<sup>2</sup> To “know the enemy” can be difficult in the case of the PRC as, “outside observers have few direct insights into the formal strategies motivating China’s force build-up, the leadership’s thinking about the use of force, the contingency planning that shapes the PLA’s (People’s Liberation Army) force structure or doctrine...”<sup>3</sup> While direct knowledge of PRC planning and doctrine may not be readily available, it may be possible to gain indirect insights into these areas through examination of a historical, and in some ways analogous, example: the Soviet side of the U.S.-USSR maritime rivalry of the Cold War. While open warfare between U.S. and Soviet naval forces (fortunately) never occurred, it may now be possible to look through the lens of history to ascertain relevant lessons learned about U.S. and Soviet Cold War maritime doctrines, and what might have happened had the United States and USSR come to blows at sea. After such analysis of the actors, environments, and similarities of these hypothetical past and future conflicts, one can come to the following conclusion: relevant lessons learned drawn from an analysis of U.S.

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<sup>1</sup> *Taiwan Relations Act*, H.R. 2479, 96<sup>th</sup> Cong., 1979.

<sup>2</sup> Sun Tzu, *The Art of War*, trans. by Samuel B. Griffith (Oxford, UK: Oxford University Press, 1963), Kindle Book location 1418.

and Soviet Cold War maritime doctrine and war plans can, in fact, usefully inform operational planning for potential future U.S.-PRC maritime conflict.

## **BACKGROUND**

The central maritime theater in a U.S.-Soviet late-Cold War conflict would likely have been in the North Atlantic Ocean and Norwegian Sea. This theater would have been a subsidiary one in a global war whose central front in Europe would have been dominated by ground warfare. Given the Cold War era deployment of large numbers of nuclear submarines, cruise missiles, aircraft carriers, and naval strike aircraft, such a maritime conflict would likely have been highly dynamic, fluid in execution, and devastating to one or both sides in its resolution.

### **U.S. COLD WAR NAVAL DOCTRINE: FORWARD OPERATIONS**

U.S. naval war planning during the later years of the Cold War, as espoused by *The Maritime Strategy* of 1986, centered on an aggressive move forward by U.S. naval forces into the home waters of the Soviet Union in order to (1) attempt to deter the Soviets from consummating a successful “battle of the first salvo”; (2) hunt Soviet ballistic missile submarines (SSBNs) and nuclear attack submarine (SSNs); and (3) seek to destroy Soviet surface and naval air forces. The United States’ overall objectives were to, “counter a first salvo, wear down the enemy forces, protect sea lines of communications (SLOCs), continue reinforcement and resupply, and improve positioning...[to] defeat Soviet maritime strength

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<sup>3</sup> U.S. Department of Defense, *Military and Security Developments Involving the People’s Republic of China 2010* (Washington, DC: Office of the Secretary of Defense, 2010), 13.

in all its dimensions, including base support.”<sup>4</sup> A significant aspect of U.S. doctrinal thinking that drove the desire to move forward into the enemy’s home waters was the concept of the Soviets’ establishment of “bastions” for their SSBNs. U.S. naval thinkers believed that they could “force Soviet submarines to retreat into defensive bastions to protect their ballistic missile submarines.”<sup>5</sup> Whether or not U.S. forward movement into Soviet SSBN operating areas would have pulled the Soviet submarine force away from its offensive objectives, U.S. naval forces would have found a spirited fight on their hands, as it appears now that “the main efforts of the Soviet Fleet forces at the outset of hostilities would be directed toward attaining sea mastery...in the operating areas of Soviet strategic submarines.”<sup>6</sup>

### **SOVIET COLD WAR NAVAL DOCTRINE: LAYERED DEFENSE**

During a late-Cold War maritime conflict, the principal tasks of the Soviet Navy would have been to (1) destroy NATO SSBNs; (2) inflict strategic missile strikes against enemy strategic installations; (3) annihilate enemy aircraft carrier battle groups (CVBGs) and other large ship forces, ASW forces, amphibious forces, and convoys; (4) debark naval landings; (5) take part in repelling landings; and (6) protect Soviet maritime traffic.<sup>7</sup> To accomplish these goals, the Soviets endeavored to employ a layered defense scheme to attain *sea mastery*, which meant obtaining superiority over the adversary in a designated area so as to, “create favorable conditions for Soviet naval forces to carry out their major combat

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<sup>4</sup> Watkins, Adm J. D., “The Maritime Strategy,” *The Maritime Strategy* (Annapolis, MD: Naval Institute Press, 1986), 11.

<sup>5</sup> Ibid., 9.

<sup>6</sup> Vego, Milan, *Soviet Naval Tactics* (Annapolis, MD: Naval Institute Press, 1992), 87.

<sup>7</sup> Ibid., 9.

missions.”<sup>8</sup> The Soviets intended to obtain sea mastery out initially to about 400 miles from their shores, and eventually out to about 800 miles, through the following actions: destroying enemy major naval formations, naval bases and command and control (C2) centers; preventing transit of enemy formations through straits and narrows; and destroying enemy ASW barriers while establishing friendly ASW barriers.<sup>9</sup> The Soviets also endeavored to establish what they termed a *favorable operational regime*, which consisted essentially of preparing and defending basing areas and ensuring the safety of Soviet maritime forces as they prepared for combat.<sup>10</sup>

To achieve their objectives of sea mastery and establishment of a favorable operational regime, the emphases of Soviet efforts were dedicated to anti-carrier warfare (ACW) and a systematic approach to anti-submarine warfare (ASW). The Soviets planned to destroy U.S. carriers through “massed and orchestrated attack by aircraft, submarines, and surface ships, whose cumulative effect is intended to overwhelm the carrier task group’s defenses by sheer weight and diversity of numbers.”<sup>11</sup> To accomplish these strikes, the Soviets emphasized the importance of the “first salvo”, whose success would be partly ensured through the method of “marking,” that is, staying in constant contact with U.S. carriers to be able to attack them at the very start of hostilities, before they could launch aircraft against Soviet targets.<sup>12</sup> In conducting ASW, rather than following the traditional Western concept of submarine-on-submarine combat conducted in isolation, the Soviets

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<sup>8</sup> Ibid., 14.

<sup>9</sup> Ibid., 14.

<sup>10</sup> Ibid., 15.

<sup>11</sup> Ranft, Bryan and Geoffrey Till, *The Sea in Soviet Strategy* (Annapolis, MD: The Naval Institute Press, 1989), 174.

<sup>12</sup> Herrick, Robert Warring, *Soviet Naval Doctrine and Policy: 1956-1986* (Lewiston, NY: The Edwin Mellen Press, 2003), 888.



stressed coordinated action by submarines, ships and aircraft.<sup>13</sup> They also favored attacks on the U.S. submarine support system as a whole, with targets that included U.S. submarine bases, C2 centers, and submarine-related coastal facilities.<sup>14</sup>

In order to accomplish coordinated ACW and ASW as described above, the Soviets placed great stress on the concept of *force control*, which consisted of control both while preparing for an operation and during combat.<sup>15</sup> While the Soviets believed, in theory, that force control could be conducted by either centralized or decentralized means, the demands of coordinated attacks against a well-defended target like a carrier group actually required highly centralized and automated C2 functions, with forces controlled according to detailed, pre-set plans.<sup>16</sup>

## **COLD WAR LESSONS LEARNED**

While it is difficult to estimate precisely what would have happened in a clash between U.S. and Soviet maritime forces, one can nevertheless glean useful lessons learned from assessment of the likely nature of an interaction of the doctrinal systems discussed above, particularly when such assessment is informed by the results of actual modern naval conflicts.

### **Lesson Learned: U.S. naval forces would probably have suffered significant losses.**

While U.S. maritime forces might have accomplished their wartime missions, the powerful combination of Soviet anti-ship cruise missile (ASCM) carrying submarines, heavily-armed ASCM-carrying surface ships, and hundreds of ASCM-armed maritime strike

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<sup>13</sup> Ranft and Till, *Sea in Soviet Strategy*, 182.

<sup>14</sup> Vego, *Soviet Naval Tactics*, 87.

<sup>15</sup> *Ibid.*, 53.

<sup>16</sup> *Ibid.*, 257.

aircraft could have caused extensive damage or destruction to U.S. surface forces. Over the past several decades, the use of a relatively small number ASCMs in combat, usually only one or a few at a time, has resulted in the severe damage or destruction of numerous modern warships. This has happened during such conflicts as the Six-Day War, the Indo-Pakistani War of 1971, the Falklands War, the Persian Gulf Tanker Wars, and the Summer 2006 War between Hezbollah and Israel. Despite the immense firepower and layered defenses of a U.S. CVBG, one could imagine that had the Soviets been able to succeed in launching a simultaneous multi-axis attack using dozens of supersonic cruise missiles carrying large and deadly warheads, the results could have been devastating. Of note, as of the end of the Cold War, no warship had ever shot down an incoming ASCM in combat; in fact, the *sole* case of this accomplishment, to this day, did not occur until the first Gulf War.

Experiences in modern real-world ASW also indicate that the enormous and capable Soviet submarine force might have inflicted significant losses on their own. As a relevant data point from the Falklands War, one Argentinean submarine was able to operate for weeks (and attempt two torpedo attacks, foiled only by malfunctions) against British ASW forces, some of the best in the world, without ever being hunted down. Regarding nuclear submarine performance in the same conflict, one British SSN was able to send the entire Argentinean surface fleet back to port after sinking one cruiser, ARA *General Belgrano*. Given that little has changed in making the seas more transparent since that time, one may conclude that the risk the Soviet submarine force posed to U.S. surface forces was probably very high.

Between the threats of massed ASCM attack and the huge and capable Soviet submarine force, it is likely that the Cold War U.S. Maritime Strategy, with its emphasis on

forward operations, would have resulted in significant wartime losses. According to some analysts, even the 15 CVBG/100 SSN U.S. naval force of the late-Cold War era “would have been hard-pressed to carry out such an ambitious plan.”<sup>17</sup>

**Lesson Learned: Soviet C2 structures were vulnerable to disruption.**

The second lesson learned from this analysis is that, while Soviet doctrine emphasized, in theory, combined-arms sub-air-surface ASCM attacks, such attacks would likely have proven very difficult to carry out under conditions of ongoing wartime operations. The force control required to execute a multi-axis combined-arms attack on a heavily-defended CVBG would have required complex and tightly executed strikes that would probably have been beyond the capability of Soviet C2 systems under all but ideal circumstances. According to Professor Milan Vego, “...such coordination is hard to achieve in practice. Serious problems always arise in coordinating the movements and actions of multipurpose submarines, aircraft, and surface ships, especially in missile strikes in the open ocean where the command post ashore often does not have reliable information on the situation.”<sup>18</sup> The system of centralized direction set up to attempt such coordination would likely have been a source of weakness if Soviet communications had been interfered with or if things did not go as the Soviet naval command planned; effective tactical control would likely have been precarious.<sup>19</sup> Given the advances in long-range precision strike (LRPS) enjoyed by the West toward the end of the Cold War, and the widespread deployment of Tomahawk Land Attack Missiles (TLAM) on U.S. tactical platforms, Western forces could

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<sup>17</sup> Pullen, Capt. L.D., USN (Ret.) and Scott C. Truver, “Security in the Pacific Rim: Evolving US Strategies, Doctrines, and Forces for Maritime Cooperation and Regional Collective Action,” *The Evolving Maritime Balance of Power in the Asia-Pacific: Maritime Doctrines and Nuclear Weapons at Sea* (Singapore: World Scientific Publishing Co. Pte. Ltd., 2006), 134.

<sup>18</sup> Vego, *Soviet Naval Tactics*, 254.

<sup>19</sup> Ranft and Till, *Sea in Soviet Strategy*, 169.

likely have inflicted significant disruption upon the potentially fragile Soviet C2 system. This U.S. C2 disruption capability, combined with the fog that normally accompanies prolonged combat conditions, leads directly to the next lesson learned.

**Lesson Learned: Risk to U.S. forces would have been highest at the start of hostilities.**

Given extensive Soviet reconnaissance and intelligence capabilities, and their doctrine of “marking” any U.S. carrier forces that might have threatened the Soviet fleet or homeland, it is possible that the Soviet naval command could have enjoyed a fairly solid picture of the locations of U.S. surface and carrier forces during periods of heightened tensions and for the first days of a maritime conflict.<sup>20</sup> Thus, by starting with an accurate tactical picture, careful planning, intact strike forces, and a still-effective C2 structure, it is possible that initial Soviet missile strikes against Western forces could have been well coordinated and devastating in effect. This is particularly likely given the emphasis on early and aggressive forward deployment of U.S. naval forces. Over time, factors such as Western efforts against the vulnerable C2 and reconnaissance system described above, rigidity in Soviet tactics, and sheer attrition of strike platforms would likely have taken their toll. Only close to the Russian coasts, “where Soviet tactical reconnaissance can provide quite precise and timely data,”<sup>21</sup> would one have expected Soviet maritime strike forces to maintain their effectiveness during a prolonged conflict.

## **SOVIET INFLUENCES ON PRC MARITIME FORCES**

In order to derive current utility from the analysis laid out above, one must establish whether the lessons learned discussed above are relevant to a potential future U.S.-PRC

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<sup>20</sup> Vego, *Soviet Naval Tactics*, 354.

<sup>21</sup> *Ibid.*, 358.

maritime conflict. As an insight into the sources of doctrine of the PRC's People's Liberation Army Navy (PLAN), one can see that its development to date shows substantial signs of influence by the Soviet Navy, and that this influence "has, if anything, increased since the dissolution of the Soviet Navy..."<sup>22</sup> The first and most obvious source of post-Cold War Soviet-to-PLAN influence is the plethora of Russian and Russian-derived equipment operated by the PRC's armed forces. Due to U.S. and European Union arms embargoes put in place after the 1989 Tiananmen Square massacre, Russia entered into a strategic relationship with China in 2001 that has resulted in Russia becoming China's "predominant supplier of military hardware and naval hardware specifically." This hardware has included such items as "400 Sukhoi fighters...anti-air and precision ground attack weapons for aircraft; 12 Russian *KILO* Submarines, eight with CLUB long-range anti-ship missiles; four Russian *Sovremenny* class missile destroyers; Russian weapons and electronics packages for three new classes of stealthy warships; [and] Russian one-meter electro-optical and radar satellites."<sup>23</sup> Of note, much of this equipment represents the last and the best of Soviet Cold War technology, sometimes further upgraded with more recent advances. As well as direct transfers of Russian military technology, much of China's other naval hardware is derived either completely or partially from Soviet-era equipment. Examples include the *Shang*-class SSN (designed with Russian assistance and a derivative of the Soviet-era *Victor III*-class SSN)<sup>24</sup>; the Xian H-6 bomber (a copy, significantly improved in its latest versions, of the Tupolev Tu-16 Badger); and the Shenyang J-11 fighter (a copy of the Sukhoi SU-27 fighter).

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<sup>22</sup> Howarth, Peter, *China's Rising Sea Power: the PLA Navy's Submarine Challenge* (Abingdon, UK: Routledge, 2006), 117.

<sup>23</sup> Prabhakar, Lawrence S., "Maritime Strategic Trends in the Asia-Pacific: Issues and Challenges," *The Evolving Maritime Balance of Power in the Asia-Pacific: Maritime Doctrines and Nuclear Weapons at Sea* (Singapore: World Scientific Publishing Co. Pte. Ltd., 2006), 57.

<sup>24</sup> O'Rourke, Ronald, *The Impact of Chinese Naval Modernization on the Future of the United States Navy* (New York: Novinka Books, 2006), 67.

In addition to the widespread adoption of Russian and Russian-derived equipment, perhaps more importantly the PLAN has, since its inception, been heavily influenced by Soviet doctrine and strategy. In addition to the fact that the “organizational structure of the PLA as a whole is still modeled closely on that of the Soviet military of the 1950s,”<sup>25</sup> the overall naval strategy that has driven the PLAN’s development since the 1980s is directly analogous to the Soviet Cold War layered defense scheme developed by ADM Sergey Gorshkov. ADM Liu Huaqing, the “Father of the PLAN” who was educated in the Voroshilov Naval Academy in the 1950s and is regarded by some analysts as “China’s Gorshkov”<sup>26</sup>, created this guiding Chinese doctrine. His strategy promulgated a layered defense consisting of “green-water”, located between the “brown waters” (coastal waters) and “blue waters” (beyond the first major island chain off the East Asian coast).<sup>27</sup> As a final result of this Soviet influence, as well as situational and geographic similarities, it has been said by some that, “China’s emerging maritime anti-access force can be viewed as broadly analogous to the sea-denial force that the Soviet Union developed during the Cold War to deny U.S. use of the sea or counter U.S. forces participating in a NATO-Warsaw Pact conflict.”<sup>28</sup>

## **COUNTERARGUMENT: DIFFERENCES BETWEEN THEN AND NOW**

Some might say that there is little to be gained in looking decades ago and to the other side of the earth in order to review a conflict that never happened and then draw lessons

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<sup>25</sup> Howarth, *China’s Rising Sea Power*, 117.

<sup>26</sup> Ji, You, “China’s Naval Strategy and Transformation,” *The Evolving Maritime Balance of Power in the Asia-Pacific: Maritime Doctrines and Nuclear Weapons at Sea* (Singapore: World Scientific Publishing Co. Pte. Ltd., 2006), 73.

<sup>27</sup> Ibid., 73.

<sup>28</sup> O’Rourke, *Chinese Naval Modernization*, 24.

learned in order to plan for a conflict that will likely, and certainly hopefully, never happen either. One would certainly be foolish not to acknowledge the differences that exist in the forces on both sides, along with the effects of the “Revolution in Military Affairs” that has accompanied the Information Era.

### **Cold War vs. current-era forces**

Significant differences do exist between U.S. naval forces of the late 1980s and those of the present day. Probably the most obvious difference is in sheer numbers, which for the U.S. Navy have declined significantly since the 600-ship zenith of the late Cold War. In terms of primary combatants, U.S. CVBGs have dropped from a total of 15 to a present-day 11, and nuclear-powered attack submarines from over 100 to today’s low 50s. Just as dramatically, the number of P-3 Orions, the Navy’s primary ASW Maritime Patrol Aircraft, has dropped from a Cold War high of about 500 to a present-day fleet of less than 200 worldwide, with widespread deployment of its successor (the P-8 Poseidon) still years away.

However, while current U.S. naval forces exist in smaller numbers than their Cold War antecedents, this diminution is offset by the fact that the PRC’s maritime forces are *also* smaller than their Cold War analogues--the maritime forces of the Soviet Union. While the PLAN and its associated Air Force (PLANAF) have been experiencing rapid expansion in recent years, their numbers are still far fewer than those of Soviet maritime forces at their peak. As an example, the PLAN’s fleet currently consists of about 75 principal combatants, more than 60 submarines, and roughly 85 missile patrol craft.<sup>29</sup> By comparison, the Soviet Fleet in the later years of the Cold War consisted of about 300 principal combatants, 400 submarines, and 110 missile patrol craft.<sup>30</sup> While numbers of the PLANAF’s latest missile-

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<sup>29</sup> Department of Defense, *Military and Security Developments*, 2.

<sup>30</sup> *Jane’s Fighting Ships 1986-87* (London, UK: Jane’s Publishing Company, 1986), 532.

carrying bombers are difficult to obtain, they would likely show a similar lessening of numbers, with perhaps dozens of modern Chinese ASCM-carrying long-range bombers compared to hundreds of Soviet-era equivalents.

### **The effects of information technology – has the game changed?**

A major difference between Cold War forces and those of the present day can be seen in advances in their information technology (IT) systems. For the Soviet Navy, limitations in minicomputer technology resulted in “reconnaissance-strike complexes” (in today’s terms, information warfare systems) that “may look formidable on paper, but...probably not so effective in practice.”<sup>31</sup> Given that the PRC has access to modern IT systems and has made specific efforts in this area, it is unlikely that its armed forces suffer from the kind of IT deficiencies that the Soviets faced. In fact, after observing U.S. operations in Afghanistan and Iraq, the PLA embarked on an aggressive campaign of “informatization”, which “emphasizes the effects of modern information technology on military decision and weapons employment cycles.”<sup>32</sup>

However, while one might assume that China’s advances in “informatization” would have largely diluted the influence of Soviet doctrine on the PLAN, there are some significant reasons why this may not be the case. First, while overall PRC military doctrine has undergone significant evolution as a result of observation of the U.S. performances in Iraq and Afghanistan, those lessons lack as much relevance regarding naval warfare, as control of the sea by U.S. and Allied forces was never seriously challenged.<sup>33</sup> Observation of the United States’ recent conflicts may actually have reinforced the relevance of Soviet naval thinking; much of the development of the Soviet model of integrated defense was driven by a

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<sup>31</sup> Vego, *Soviet Naval Tactics*, 363.

<sup>32</sup> Department of Defense, *Military and Security Developments*, 3.



need to stop strikes from U.S. carriers and submarines, similar to the PRC's potential challenges of dealing with sea-based LRPS weapons that have become the hallmark of U.S. power projection. Another reason that post-Cold War IT advances might alter the nature of U.S.-PRC naval warfare less than expected could be the disruption by the United States and PRC of each others' communications circuits. Both sides are likely to conduct both kinetic and non-kinetic operations to reduce their opponents' C2 networks' available transmission bandwidth. Given the huge flows of data necessary to feed modern IT systems, one might find that information operations in a highly communications-constrained environment, which U.S. armed forces have not experienced in any recent conflict, could look a great deal more "legacy" than some might expect.

## **CONCLUSIONS and RECOMMENDATIONS**

Based on the evidence and analysis shown above, it appears that one can, in fact, draw relevant lessons learned for future U.S.-PRC operations from a look back at the U.S.-Soviet Cold War naval rivalry. By taking those lessons learned and adapting them to current or near-future conditions, the following recommendations may be relevant for U.S. operational commanders in preparing for potential U.S.-PRC maritime conflict.

### **Be ready for extensive attacks on maritime-related infrastructure targets.**

With Soviet doctrine as a guide, PRC forces may adopt the holistic approach of their Soviet predecessors in addressing warfare modes such as ASW and ACW. Soviet doctrine emphasized the use, during a nuclear conflict, of both ballistic and cruise missiles to strike

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<sup>33</sup> Howarth, *China's Rising Sea Power*, 117.

ships in port,<sup>34</sup> along with other strategic installations. Given that the Soviets considered that the high-accuracy weapons of the late Cold War had become “comparable in combat effectiveness with low-yield tactical nuclear weapons,”<sup>35</sup> China’s marriage of precision strike capabilities with ballistic missiles may result in a similar doctrinal construct for their employment. Thus, while much attention has been paid to the tactical-level threat that Chinese cruise and conventional ballistic missiles pose to U.S. airfields on Guam and Okinawa<sup>36</sup> and to aircraft carriers at sea, one must consider that these weapons may also be intended for operational-level use against maritime-supporting C2 installations, naval bases, and other maritime infrastructure targets throughout the Western Pacific. In particular, given that the PLAN seems to be weak in tactical ASW,<sup>37</sup> missile attack may be used as a means of compensation against the U.S. submarine force’s Western Pacific infrastructure. Potential submarine-supporting targets could include such installations as Naval Base Guam; Submarine Group SEVEN headquarters and port facilities in Yokosuka, Japan; and communications installations in Guam, Okinawa, and Australia.

### **Start the fight out of arm’s reach.**

Given that the “American Way of Power Projection” typically starts with, “rapidly deploying substantial air, ground and naval forces to forward bases and the littoral,”<sup>38</sup> these forces could run into the teeth of the PRC’s initial and most effective attack. This is because, as informed by Soviet doctrine, the PLAN and PLANAF would probably endeavor to win their own “battle of the first salvo” by initiating hostilities with multi-axis, complementary,

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<sup>34</sup> Vego, *Soviet Naval Tactics*, 173.

<sup>35</sup> Herrick, *Soviet Naval Doctrine and Policy*, 983.

<sup>36</sup> Eastburn, Capt. D.W., USA, “Island Paradise at the Forefront of Missile Defense,” <http://www.army.mil/news/2009/11/16/30499-island-paradise-at-the-forefront-of-missile-defense/> (accessed 18 October 2010).

<sup>37</sup> Ji, You, “China’s Naval Strategy,” 79.

massed and orchestrated attacks using submarine, surface and air-launched ASCMs, perhaps now combined with anti-ship ballistic missile (ASBM) strikes. Since PRC maritime forces will likely have their best tactical picture and C2 capability, such attacks against U.S. forces would likely be far more effective at the outset of hostilities than during later periods of ongoing conflict.

According to the Center for Strategic and Budgetary Assessment, “the advanced anti-ship sensor and weapon systems China is now fielding and will certainly augment in the coming years will make it increasingly difficult for the U.S. Navy to operate such ships effectively within adversary weapons ranges at acceptable levels of risk.”<sup>39</sup> One alternative operational maneuver scheme, which could provide the risk reduction necessary to succeed in a prolonged campaign, would be to surge forward undersea strike forces, which are largely immune to PRC area-ship weapons systems, while initially dispersing air assets and withdrawing surface/CSG forces beyond the range of combined-arms PRC cruise and ballistic missile strikes. This initial maneuver could center on forward-deployed U.S. SSNs and SSGNs conducting TLAM strikes from the littorals and/or initial ASW operations. Follow-on undersea forces would also execute long-range TLAM strikes when within effective range and while still in transit to reinforce the undersea ASW effort. Undersea-launched TLAM strikes would focus against PRC C2 and reconnaissance infrastructures, and when combined with other U.S. kinetic and non-kinetic efforts, could work in harmony as part of a “blinding campaign” against PRC battle networks, such as the campaign discussed in the recently published AirSea Battle concept.<sup>40</sup> Once this blinding campaign had gained

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<sup>38</sup> Tol, Jan Van et al, *AirSea Battle: A Point-of-Departure Operational Concept* (Washington, DC: Center for Strategic and Budgetary Assessments, 2010), 23.

<sup>39</sup> Ibid., 25.

<sup>40</sup> Ibid., 56.

traction and effectively reduced PRC reconnaissance and C2 assets to tactical-level capabilities, U.S. surface and carrier forces could then move back in to their own effective strike range while being able to keep PRC tactical reconnaissance forces at arm's-reach through organic air power and maneuver. With regard to deterrent value, an unexpected pre-hostilities withdrawal of U.S. forces beyond PRC missile range could actually throw Chinese operational execution off-balance and give PRC leaders reason to pause, as the ability to target U.S. forces with an effective "first salvo" may be a crucial element of PLA contingency planning.

### **FINAL REMARKS**

Taking note of the influence of Soviet doctrine on the PRC's maritime forces, further areas call for similar exploration as that discussed above. For example, we now know that a lack of undersea sensors on some Soviet ships assigned to ASW duty may have been made up for by positioning data provided by through the activities of the Walker spy ring.<sup>41</sup> Is the apparent weakness and lack of serious investment in PLAN ASW capability made up for by an analogous PRC source of U.S. submarine positioning data that is unknown to us? As another example, we now know that the Soviets were highly worried about the threat of now-retired U.S. shore-based TASM's and Harpoon missiles.<sup>42</sup> Is there a way, through either shore based deployment and modification of our existing cruise missiles, or by providing them to our allies, that we can obtain similar deterrent value? With the current deployment of what is likely to be the PRC's first operational class of SSBNs, will the PLAN establish a Soviet-style SSBN "bastion" in the South China Sea? If so, are they now laying seabed

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<sup>41</sup> Weinland, Robert, "Developments in Soviet Naval Strategy," *East-West Relations in the 1990s: The Naval Dimension* (New York: St. Martin's Press, 1990), 140.

sensor arrays, which we now know were called for by Soviet doctrine? Soviet defensive ASW also relied little on stealth and more on active defense, with extensive use of active sonar by submarines.<sup>43</sup> Does this help explain the apparent lack of passive towed sonar systems on PLAN submarines? Finally, the Soviets considered that one of the main prerequisites for over-the-horizon targeting was, “to have a global navigation system that allows strike platforms to determine their own position accurately in any kind of weather...”<sup>44</sup> Is this the real *raison d’être* for China’s deployment of the Beidou-2 satellite navigation system? If so, should it be a primary target during a conflict?

By drawing further relevant lessons learned about U.S. and Soviet Cold War naval doctrine, and applying those lessons to planning for (or deterring) potential U.S.-PRC maritime conflict, we may find answers to questions such as the ones asked above. Perhaps more importantly, we may recognize questions that we have not yet even asked, but should.

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<sup>42</sup> Herrick, *Soviet Naval Doctrine and Policy*, 989.

<sup>43</sup> Ranft and Till, *The Sea in Soviet Strategy*, 193.

<sup>44</sup> Vego, *Soviet Naval Tactics*, 184.

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